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1. Safety precautions

CAUTION:



The lightning flash with **Warning:**

arrowhead symbol, within an equilateral triangle, is intended to alert the user to "dangerous voltage" and to prevent from a risk of electric shock.

The exclamation point within an equilateral triangle is intended to alert the user to important operating and maintenance (servicing).

WARNING: Do not use this STB where contact with or immersion in water is a possibility. Do not use near flower vase, washbowls, kitchen sinks, laundry tubs, swimming pools, etc.

WARNING: Do not put the candle or lamp stand on the cabinet; otherwise, there is the danger of fire.

WARNING: The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the unit. If you are not sure of the type of power supply (for example, 120 or 230 V) to your home, consult your local dealer or local power company.

WARNING: This product install diodes. Do not open the cabinet or touch any parts in the inner mechanism. Consult your local dealer for technical service if the opening is required.

Note: To ensure proper use of this product, please read this User manual carefully and retain for further reference.

Note: This product install diodes. Do not open the cabinet to avoid the unit direct exposure to radiation.

Unit Cleaning: After the unit power is turned off, you can clean the cabinet, panel and remote control with a soft cloth lightly moistened with a mild detergent solution.

Attachments: Never add any attachments and/or equipment without the manufacturer consent; as such additions may result in the risk of fire, electric shock, or other personal injury.

Locating: Slots and openings in the cabinet are provided for ventilation to protect it from overheating. Do not block these openings or allow them to be blocked by placing the STB on a bed, sofa, or other similar surface, nor should it be placed over a radiator or heat register.

Power-Cord Protection: Place the power-supply cord out of the way, where it will not be walked on. Please take special attentions to cords at plugs, convenience receptacles, and the point where they exit from the unit.

Object and Liquid Entry: Never put objects of any kind into this STB through openings, as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill any liquid on the STB.

Note: Moisture may be formed on the lens In the following conditions:

- when the unit is suddenly moved from a cold environment or an air-condition room to a warm place.
- immediately after a heater has been turned on.
- in a steamy or very humid room.

If the moisture forms inside the unit, it may not operate properly. To correct this problem, turn on the power and wait about two hours for the moisture to evaporate.

Parts Replacement: When the unit parts need to be replaced, user should make sure the service technician use the replacement parts specified by the manufacturer or having the same characteristics as the original part. Unauthorized replacement may put the unit In the risk of fire, electric shock or other hazards.

Safety Check: After all the maintenances and repairs are done, user is required to request the service technician to conduct the overall safety check to ensure the machine is In the proper condition.

2. Environment protection



Attention!

Your product is marked with this symbol. It means that used electrical and electronic products should not be mixed with general household waste. There is a separate collection system for these products.

Information on Disposal for Users (private households) in the European Union

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge*. In some countries* your local retailer may also take back your old product free of charge if you purchase a similar new one. *) Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements.

By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

Information on Disposal for Business Users

In the European Union

If the product is used for business purposes and you want to discard it:

Please contact your dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling. Small products (and small amounts) might be taken back by your local collection facilities,

In other Countries outside the EU

If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal.

3. Operating notes

NOTE!

3.1. Automatic Power Down

In accordance with actual European Union requirements, Your receiver is equipped with function "Automatic Power Off". It works by switching the receiver into standby mode after a period of 3 hours after the last active use. In practice this means that if during this time the receiver will not be given any command by using the remote control or keypad on the front panel, the receiver turns off. Turning off the receiver will be preceded (2 minutes previous) by a relevant message appears on the TV screen. Please also note that this feature is enabled by default, but at Your own request, You can disable it using the appropriate functions in the receiver menu.

3.2. Working with external USB drive (only for receivers with USB connector)

- During the selection and operation with USB drive (hard drive, flash memory), user should pay attention on:
- Drive is compliant with USB 2.0 and have the appropriate parameters of read and write speed,
- Drive contain single partition, formatted in a supported format,
- If necessary (especially for USB hard drives, which are characterized by a high power consumption), drive should be supplied from an external power supply,
- Do not disconnect during a write/read data operation,
- Do not use very full or fragmented drive,

Mismatch above recommendations may result in incorrect operation of the devices and in extreme cases can cause damage.

The manufacturer takes no responsibility for any damages directly or indirectly caused by loss of recorded or edited data stored on an external USB drive which was connected to the receiver, and gives no warranty for any other data on the USB drive when case of abnormal function receiver will happened.

3.3. Battery installation

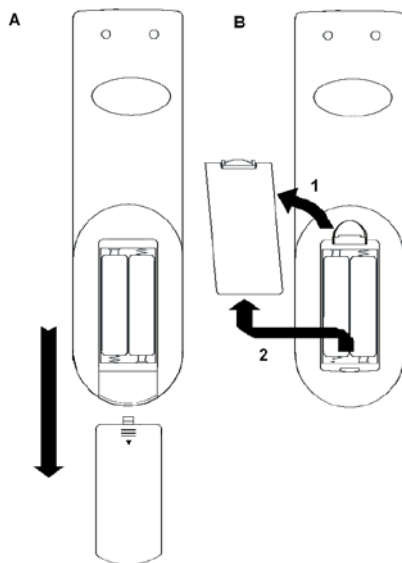
To install the batteries in the remote control, remove the flap protecting the battery compartment (see Fig.: A – slider type - push and slide, B – latch type - lever the latch and pull the flap). If inside the chamber there are used batteries, they must be removed. Then put new batteries inside. When installing the battery, pay special attention on the polarity - the direction of insertion of both batteries. The correct polarity is drawn on a description inside the battery compartment in the remote control. After installing the batteries, place protecting flap on its original position.

Service life of batteries

- The batteries normally last for about one year despite that it depends on how often and in what way the remote control is operated.
- If the remote control fails to work even when operated near the DVB receiver, replace the batteries.
- Use size 7 (AAA) batteries (2 pieces).

WARNING!

- Do not use rechargeable (Ni-Cd) batteries.
- Do not attempt to recharge, short circuit, disassemble, heat the batteries or throw them into the fire.
- Do not drop, tramp or impact the remote control. This may damage the parts and lead to malfunction.
- Do not mix used battery with new one ever when using.
- If the remote control shall be spared for a long time, remove the batteries. Otherwise, electrolyte may leak, which may lead to malfunction, even fire accident when some substance contacts with the electrolyte.
- Wipe away the electrolyte having leaked inside the remote control, and replace with new batteries.
- If any electrolyte happens to touch some parts of your skin, wash it off thoroughly with clean water immediately.



4. Features

- MPEG-Fully DVB-S / DVB-S2 HD and DVB-T compliant
- Multilingual menu text support
- Fast channel switching
- Channel list editing
- Favorite channel list editing
- Electronic Program Guide (EPG) for on screen channel information
- Teletext supported by VBI insertion and software emulation
- Subtitle supported
- Parental lock facility by channel and program event
- HDMI HD Video/Audio Output
- S/PDIF for digital audio or Dolby digital bitstream output
- LAN 10/100 Mbps Ethernet (optional)
- Software update via LAN port (optional)
- USB 2.0 Host
- Time Shift
- Video Recording
- Exciting games embedded
- DiSEqC 1.0, 1.1, 1.2 and USALS

5. Remote control

You can power on/off the receiver, operate on screen menu, and use a variety of hot key function. Depending on configuration, one of two remote controllers may be attached to receivers set:



(POWER)

To switch your receiver on from standby or standby to on.

(MUTE)

Used to enable or disable the audio

NUMERIC KEYS 0 - 9

Used to select channels or enter programming parameters

TV / RADIO or

Receiver switches between TV and Radio mode.

(ZOOM)

Press key to select zoom times, from X1 to X16.

(PREVIOUS)

Return to the previous menu or status.

AUDIO or

Audio channels setup, to select audio mode; Left, Right, Stereo.

TV/STB or TV/RCV

Receiver switches between TV and receive mode.

INFO or

To display EPG information of current service.

EPG (Electronic Program Guide)

Display the Programs guide on screen when available.

TXT or

Shows teletext information of the current channel supports.

SUBT or

Subtitle Display.

MENU

Displays the Main Menu on the screen, or return to the previous menu or status

EXIT

Cancel the user selection and return to the viewing mode from a menu.

OK

To select menu option, or to updated on entry.

←,→ KEYS

To adjust volume level, or to move cursor left or right in the menu

↑,↓ KEYS

To change channels, or to move cursor up or down in the menu

P+/P-

To move up the cursor to the next or previous page in the menu or channel list

RED, GREEN, YELLOW, BLUE, WHITE AND BLACK KEY

Has different functions per menu.

UHF

In case your TV is connected through RF Modulator (UHF), select output channel number between CH21 and CH69 with up and down key. (optional)

FIND or

Use to prompt find channels sort by character.

SLEEP or

Press sleep key to switch between Sleep Timer Off /10/30/60/90/120 minutes.

P/N

Press P/N button to switch the display mode (optional)

FAV (FAVORITE)

To set receiver to the favorite list mode, display actual favorite channel list.

USB or

Press this button to enter the File Manager / File list menu directly.

OPTION

To display list of NVOD video tracks.

16:9/4:3

To switch screen aspect mode. (optional)

STATUS

To display receiver and received signal parameters.

► Play

To play the JPEG or recording file.

■ Stop

To stop JPEG player, recording file, Time Shift, or playback.

II PAUSE

Used to select the freeze function. Press once to freeze the screen picture.

● Record

To start recording.

◀◀ Fast Backward

To start Fast Backward function

▶▶ Fast Forward

To start Fast Forward function.

◀◀ Slow Backward

To start Slow Backward function.

▶▶ Slow Forward

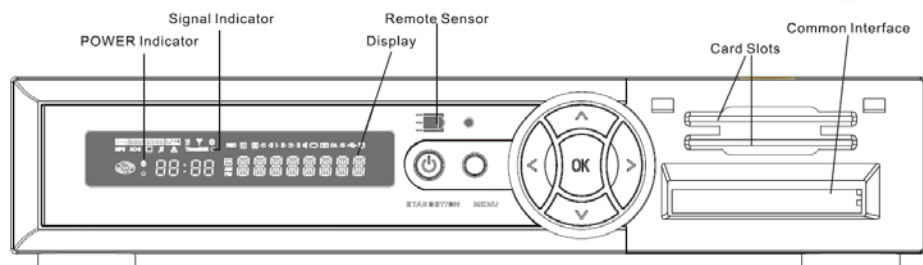
To start Slow Forward function.

TMS (Time Shift)

Press this button to display Time Shift info bar. (optional)

F1 (Reserve)

6. Front panel

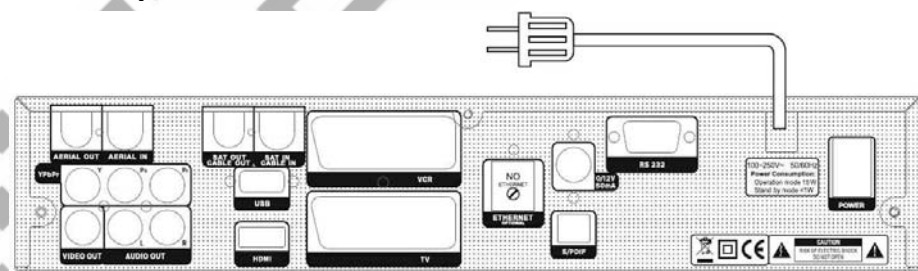


- POWER:** To switch the receiver power on/stand by
- MENU KEY:** To enter into the main menu.
- ←, →:** To adjust volume level, or to move cursor left or right in the menu
- ↑, ↓:** To change channels, or to move cursor up or down in the menu
- OK KEY:** To see TV/Radio channel list, or to confirm in the menu.
- Remote Sensor:** Detects infrared signal from remote control unit
- Power Led:** Lights up while the receiver is power on
- Signal Led:** When receiving signal is strong, the signal led is lighted.
- Display(4-Digit/7-Segment):** Indicates operating status of receiver
- Card Slot:** Two Smart Card Interfaces for CONAX cards.

Insert the smart card chip side up!

Common Interface: Two Sockets for Conditional Access Modules CAM.

7. Rear panel



Please refer to the diagram above for all possible connections of your receiver

Do not connect the unit to the mains socket until all other connections have been made and checked.

Your configuration can vary depending on model.

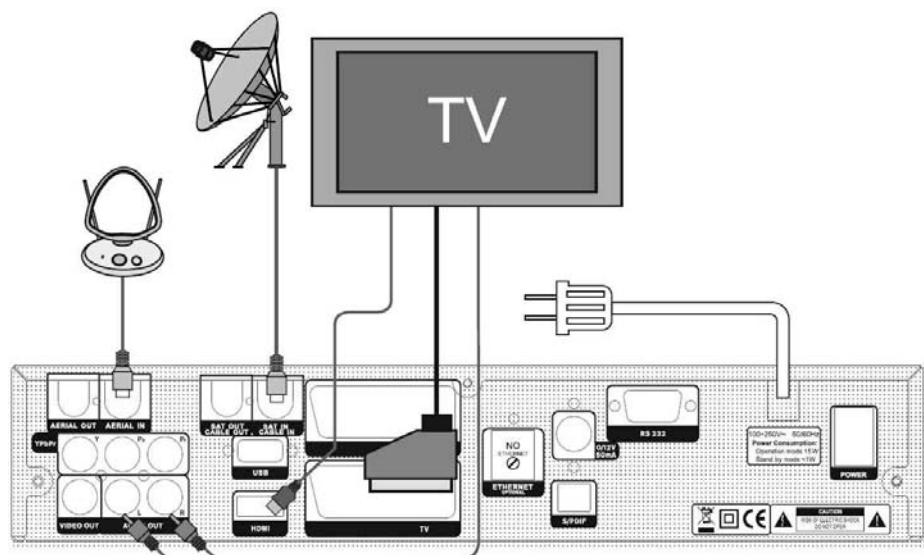
- SAT IN:** This port is to connect the coaxial cable from LNB/Dish. Max. 500mA
- SAT OUT:** This enables the connection of another satellite receiver. (Optional)
- AERIAL IN:** This port is to connect the coaxial cable from terrestrial antenna.
- AERIAL OUT:** This enables the connection of another terrestrial receiver. (Optional)

R, L (AUDIO OUT):	These RCA connectors are used to connect any external audio amp or system.
CVBS:	This RCA connector is used to connect any external video.
S/PDIF:	This RCA connector is used to connect external digital audio system.
TV:	This is used to connect your TV through SCART cable.
VCR:	Audio and Video input/output socket for the video cassette recorder or suchlike.
HDMI:	Audio and Video output socket for TV set with HDMI Input Jack only.
Y, PB, PR:	Component video output socket for TV set.
0/12V 50mA:	Used to connect 12V to an external device. (Optional 0V/12V switch driver.)
USB:	USB 2.0 Host, connect to USB hard disk, or flash disk
RS 232C:	This is used to connect your receiver to a computer through a serial cable.
Ethernet:	Network port, you can get a new software updates from this port. (Optional)
POWER:	To switch ON/OFF the receiver power supply. (Optional)

8. Connecting Your system

There are three ways to connect the receiver to your existing TV system. We recommend using one of the following cases for the best result:

1. If you have a high definition television set, you should use a HDMI cable for best result, Plug one end of the cable into the HDMI socket on the receiver, and the other end into the matching socket on your television. In this case, you do not have to make audio connections because the HDMI connector can output stereo audio or Dolby digital audio.
2. Connect one end of SCART cable to the TV (SCART) jack on the back of the receiver and the other end to a SCART jack on your TV.
3. Connect one end of RCA cable to the RCA jack on the back of the receiver and the other end to a RCA jack on your TV.



Finally connect the coaxial cable from LNB to the LNB IN jack on the receiver.

With External Audio / Hi-Fi System

To connect any external Audio Hi-Fi system, the receiver has been provided with two RCA connectors at the back of the receiver marked with Audio L and R.

Connect an RCA stereo cable from the AUDIO L, R jacks on the back of the receiver to the LINE, AUX, SPARE OR EXTRA input jacks on your Hi-Fi System.

9. Basic operations

9.1. Turn on STB

First, press the [POWER] to turn on the unit.

When the STB is first used, there will play the first channel from the default Channel List. If the STB is not first used, STB will play the same channel as last time before turning off.

? Frequently Asked Question

Q: The power of my STB has been turned on and not in Standby mode, but the TV screen showed nothing:

A: Make sure the TV set has been set to the correct video input (not the TV channels). For example, if you have connected the unit with the Video1 input of the TV set, the TV set has to be switched to Video1.

Q: The power of my STB has been turn on and not in Standby mode, but the TV screen showed nothing except popup window with "No Signal" information.

A: That means the channel, which you select, is no signal. Check connection of signal cable or contact operator.

9.2. Power

1. Press [POWER] Key can enter the Standby state
2. In Standby state, press [POWER] Key again can call back the unit and go on play the previous channel
3. User can also disconnect the device's main power to end the Standby state.

9.3. Channel Up/Channel Down

In full screen, press [↑/↓] to change channel.

9.4. Volume Up/Volume Down

In full screen, press [←/→] to adjust volume.

9.5. Number

In full screen, use number key and press [OK] on the Remote Control Unit to change channel.

9.6. Mute

1. Press [MUTE] key to mute the sound and the screen will show up mute OSD.
2. Press [MUTE] key again to restore sound.

9.7. Pause

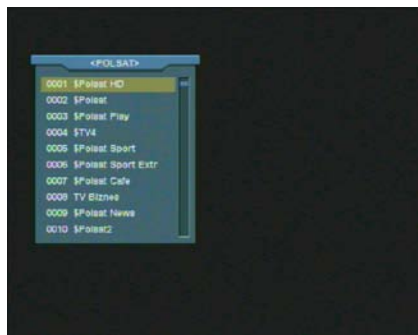
1. In playing mode, press [PAUSE] key, the picture will be paused, but the sound of the channel will still continues.
2. Press [PAUSE] key again, the screen's picture will skip over to the current playing picture, and the sound of the channel will corresponding playing.

9.8. Recall

Press [PREVIOUS] key will directly switch to the previous channel that you played before current channel.

9.9. Favourite

1. In full screen, press [FAV(FAVORITE)] key, it will display a window of "Favorite Group" on the left of the screen, which you can watch like below.



2. You can press [←/→] keys to select different "Favorite Group".

Pressing [P+/P-] keys can implement the “Page up/Page down” function

3. Press [Exit] key to exit the current window.

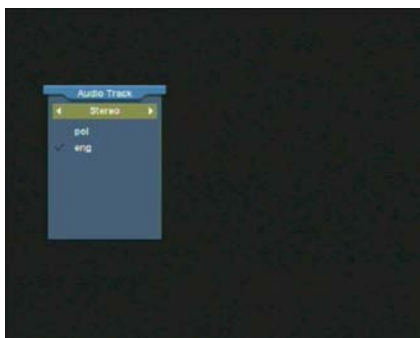
? Frequently Asked Question

Q: Why the screen displays “No Favorite Channel”, after pressing [FAV(FAVORITE)] key?

A: It is because that you haven't set any channels as “favorite channel”. Please refer to Favorite

9.10. Audio

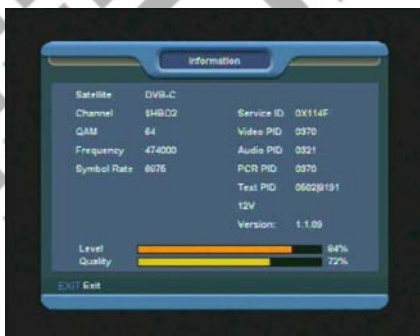
1. In full screen, press [AUDIO] key can open the “Audio” window on the screen.



2. You can modify the audio track by press [↑/↓] key and modify the audio mode by press [←/→] key.

3. Mode: Left/Right/Stereo/Mono

9.11. Information



In full screen, press [i(INFORMATION)] key can open information screen, in the window shows the

parameters of current channel.

9.12. EPG

1. The STB has an Electronic Program Guide (EPG) to help you navigate channels through all the possible viewing options. The EPG supplies information such as channel listings and starting and ending times for all available channels.

Press [EPG] key to display Program Guide.



2. Press [OK] key in each item can see more detail information.



3. Press [RED] key to open the “Group” window. You can press [↑/↓] key to move highlight and press [OK] key to select group of channels.

4. Press [GREEN] key to open “Options” window. You can press [↑/↓] key to move highlight and press [OK] key to select EPG events display mode: Now EPG, Next EPG, More, Schedule.



5. Press [YELLOW] key to open "Timer" window. User can save a timer as he want. More about timers You can read in

6. Press [REC] key to directly add timer for recording event.

7. In EPG menu, press [EXIT] to close EPG screen.

9.13. TV/RADIO

In TV mode, pressing [] (TV / RADIO) key can switch to Radio mode. In Radio mode, press [] (TV / RADIO) key to switch to TV mode.

9.14. Channel List

1. In full screen, press [OK] key to enter "Channel List".



2. Press [RED] key to change channels group.

3. Press [BLUE] key to open the "Sort" window. There are five kinds of sorting ways.

4. Press [GREEN] key to recall shortcut to EPG actual event details.

5. Press [YELLOW] key to enable shortcut to channel parameters edition.

6. Press [$\uparrow/\downarrow$] key to move highlight and press [OK] key to play the highlighted channel.

7. Press [P+/P-] key to page up and page down.

8. Press [EXIT] key to exit the channel list.

9.15. Sleep

1. This function can set sleep timer. When you set a sleep timer and the time arrive, the system will enter to standby automatically.

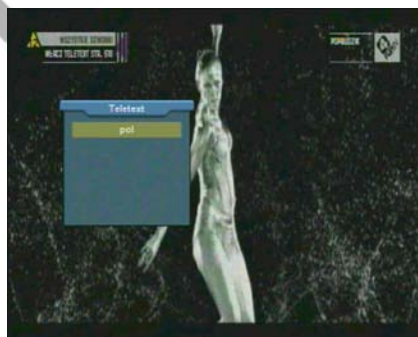
2. Press [] (SLEEP) key to switch the mode between Sleep Timer Off /10/30/60/90/120 minutes.

9.16. Page Up/Page Down

1. In Channel list, press [P+/P-] key can page up and page down the channel list.

9.17. TEXT

1. Press [TEXT] key in full screen, you can open teletext page on the channel which has teletext information.

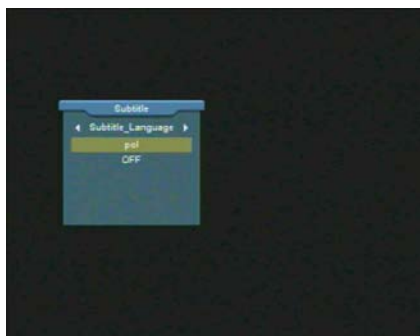


1. If the channel has no teletext information, it will show "No Teletext Data" on the screen.



9.18. Subtitle

1. Press [YELLOW KEY] key in full screen, you can switch subtitle on or off.



9.19. Find



1. Press [FIND] key in full screen can open the "Find" window. You can press [←, →, ↑, ↓] Channel Up/Channel Down/Volume Up/Volume Down]key to move highlight and press[OK]key to input the

selected symbol or letter into the dialogue.

2. After input each character, the program list on the left will search the channel according your input, and list the matched channel.

3. Move highlight to "OK" and press [OK] key can close "Find" window and you can select channel from the channels list directly.

9.20. Zoom

1. The [ZOOM] key allows you to magnify a certain area on the images
2. Press [ZOOM] key again, the image will enlarge rotate as x1, x2, x4, x6, x8, x12, x16.
3. In "x2 ~ x16" mode, using [←, →, ↑, ↓] keys to move the image center area you want to see.
4. In zoom mode, press [EXIT] to close "Zoom" window.

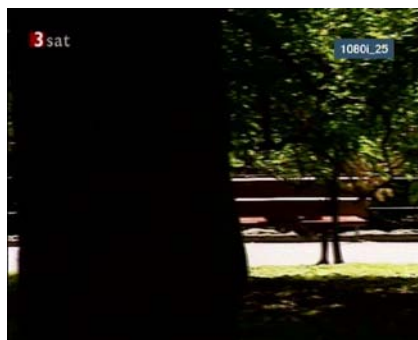
9.21. TV/RCV

1. Press [TV/RCV] key can switch between TV mode and STB mode

9.22. Menu

1. Press [MENU] key can open the menu, exit the current menu to last menu or close the window.

9.23. Video Format



1. Press [P/N (WHITE KEY)] key under Full Screen playback for 1st, it will show the current system outputting video resolution, continuously press

this key, system will switch its outputting video resolution by sequence "by source-> by native TV -> 480i-> 480P-> 576i-> 576p-> 720P-> 1080i".

9.24. Time Shift

1.If you connect the USB HDD, and enable the Time Shift function in the menu "Main Menu/ USB/ PVR Setting/Time Shift", it will start the Time Shift function automatically after you switch the program, and when you press the [Tms] button the Time Shift info bar will displayed as the following picture:



2.You can press [II] button to pause the video, and can save the picture to flash by press [P+] button when the video is paused.

3.You can press [◀◀] or [▶▶] button to Fast Backward or Fast Forward.

4.You can press [◀|] or [|▶] button to Slow Backward or Slow Forward.

5.Press [←] or [→] button to jump to different position, then press [OK] button to confirm.

6.Press [■] button to exit the playback.

9.25. Record

1.If you connect the USB HDD, You can press [●] button to start record function, as following picture:



2.Press [▶] button to display the record info bar when you recording.

3.Press [●] button again to setting the record time.



4.You can press [II] button to pause the video, and can save the picture to flash by press [P+] button when the video is paused.

5.You can press [◀◀] or [▶▶] button to Fast Backward or Fast Forward.

6.You can press [◀|] or [|▶] button to Slow Backward or Slow Forward.

7.Press [←] or [→] button to jump to different position, then press [OK] button to confirm.

8.Press [■] button to stop the recording.

9.26. Exit

Press [EXIT] key can exit the current menu to last menu or close the window

10.Menu “Service”

When you press [Menu] key to enter menu, there will display the picture like below:



- 1.Press [$\uparrow/\downarrow$] key to select menu pages among Service, Installation, Preference, System, Game, Conditional Access, USB and Internet (optional).
- 2.Press [OK] key to enter the selected item.



In “Service” menu:

- 1.Press [$\uparrow/\downarrow$] key to select menu items among Organizing Services and Organizing Favourites.
- 2.Press [OK] key to enter the selected item.

10.1. Organizing Services

When you enter to “Organizing Services” menu, there will display the screen like below.



- 1.You can move highlight by press [$\uparrow/\downarrow$] keys to preview the current highlighted program in the right side preview window.
- 2.You can press [P+/P-] keys to implement the Page Up/Page Down function.
- 3.You can use [$\leftarrow/\rightarrow$] key to switch between list of channels and list of channel edit functions – Move, Lock, Delete, Rename, Skip.
- 4.Press color key can implement the corresponding function – Group, Options, Find.
- 5.You can press [Exit] key to enter full screen playing mode.

10.1.1. Move

You can reorder and move the service to the preferred position. Mark the desired services using [OK] button, use $\rightarrow$ button to choose Move mode and press [OK] button, then use $\uparrow/\downarrow$ buttons to move and press [OK] button to confirm.

10.1.2. Lock

You can restrain and lock the services. Mark the desired services using [OK] button, use $\rightarrow$ button to choose Lock mode and press [OK] button to confirm.

10.1.3. Delete

You can delete the services. Mark the desired services using [OK] button, use $\rightarrow$ button to choose Delete mode and press [OK] button to confirm.

10.1.4. Rename

Mark the service you want to rename, use ► button to select Rename item and press [OK] button to display keyboard, and rename it. After renaming it press [OK] button on keyboard to save.

10.1.5. Skip

You can restrain and Skip (hide) the services. Mark the desired services using [OK] button, use → button to choose Skip mode and press [OK] button to confirm.

10.1.6. Group (RED)

It is very useful to select services with different Groups.

10.1.7. Options (GREEN)

It is very convenient function to Mark the desired services with different options.

10.1.8. Find (Q)

It is an item to locate certain service by name quickly. Press [Q] button to display the “Find” submenu, use keyboard to enter service name and press [Q] button again to select the desired services.

10.2. Organizing favourites



When you enter to “Organizing favourites” menu, there will display the screen like below.

1.You can move highlight by press [↑/↓] keys in the left and right side list window.

2.You can press [P+/P-] keys to implement the Page Up/Page Down function.

3.You can use [←/→] key to switch between list of all channels at the left, list of channel in actual selected FAV list at the right and edit functions in the middle of the screen – Add, Remove, Move, Rename.

4.Press color key to implement the corresponding function – Group, Options, Find (described in previous chapter).

5.Press FAV(FAVORITE) key when cursor is active in left window, to choose actual FAV list.

6.You can press [EXIT] key to enter full screen playing mode.

11. Menu “Installation”

When you enter to “Installation” menu, there will display the screen like below:



In “Installation” menu:

1.Press [↑/↓] key to select menu items among Satellite Installation, Auto Installation, Terrestrial Installation.

2.Press [OK] key to enter the selected item.

11.1. Satellite Installation

11.1.1. Satellite

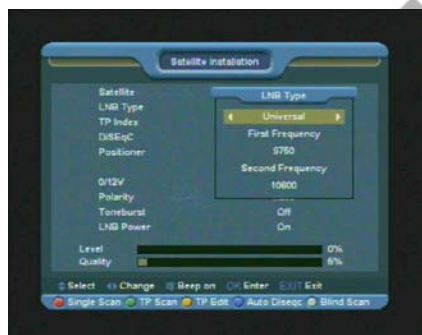
1.Satellite: Press [OK] key to enter the Satellite list.



2. Press [$\uparrow/\downarrow$] key to select satellite. Press [$P+/P-$] key to page up or page down.

11.1.2. LNB Type

In this item, press [$\leftarrow/\rightarrow$] to switch among "Standard", "User" and "Universal" mode.



11.1.3. DiSeqC

DiSeqC: You can use [$\leftarrow/\rightarrow$] key to switch options.

There are several options for your selection:

- Disable: without DiSeqC.
- 1/2, 2/2: two ports DiSeqC
- 1/4, 2/4, 3/4, 4/4: 4 ports DiSeqC
- 1/8, 2/8... 8/8: 8 ports DiSeqC
- 1/16, 2/16... 16/16: 16 ports DiSeqC



11.1.4. Positioner

Positioner: In "Positioner" item, you can press [$\leftarrow/\rightarrow$] key to switch "None / DiSeqC 1.2 / USALS" functions.

11.1.5. 22K

You can use [$\leftarrow/\rightarrow$] key to switch "ON / Off". When this item is switched to "ON", receiver will receive TV and radio input signal from 22K port. If the item is switched to "Off", the receiver will receive all signal from OK port.

Note:

When you choose LNB type "Universal", you cannot modify 22K.

11.1.6. 0/12V (Optional)

You can use [$\leftarrow/\rightarrow$] key to switch "0V / 12V". When this item switches to "12V", receiver will receive TV and radio input signal from 12V port. If the item switches to "0V", the receiver will receive all signals from 0V port.

11.1.7. Toneburst

In "Toneburst" item, you can press [$\leftarrow/\rightarrow$] key to switch "Off/On" functions.

11.1.8. Polarity

In "Polarity" item, [$\leftarrow/\rightarrow$] key to switch "Auto / H / V" functions.

11.1.9. Edit TP

When you enter to “Edit TP” menu, there will display the screen like below:



1. In “Satellite” item, press [←/→] key to switch satellite that you want to scan or press [OK] key to enter satellite list for selection.

2. In “TP Index” item, you not only can use [←/→] key to select transponder but also can use [Add] and [Delete] functions.

- When you press [GREEN] key, it will display “New TP” in “TP Index” item; You should set the parameters of “TP Frequency” and “Symbol Rate” for this new transponder. The parameters of “TP Frequency” and “Symbol Rate” can set by number keys. The available range are “3000~13450 MHz” and “1000~45000Ks/s”.
- When you press [YELLOW] key, there will show up a warning message for reminding whether you will delete the current transponder or not. If you select “Yes”, the current transponder will be deleted, and the total account of transponder will reduce 1 correspondingly.
- When you press [BLUE] key, there will show up a warning message for reminding whether you will delete all transponders or not. If you select “OK”, all transponders will be deleted.

3. For the existed transponder, you also can use number keys to modify the parameters of “TP Frequency” and “Symbol Rate”.

4. When you complete your modification, Press [RED] key, it will show up a dialog to ask you scan

mode, program type, scan type and NIT Search on/off. After you set up, press [OK] key to start scanning.

5. In the “TP Scan” item, press [EXIT] key to exit the scanning and save the current parameters.

11.1.10. Single Scan

1. Press [RED] key, it will show up a dialog to ask you scan mode (means you want to scan all channels or only scan free channels), program type (means you want to scan all channels or only scan TV/Radio channels), scan type (means preset scan, that is searching the existed TP. Automatic Scan means blind scan. It is no need existed TP info) and NIT Search on/off. After you set up, press [OK] key to start scanning.

11.1.11. Blindscan

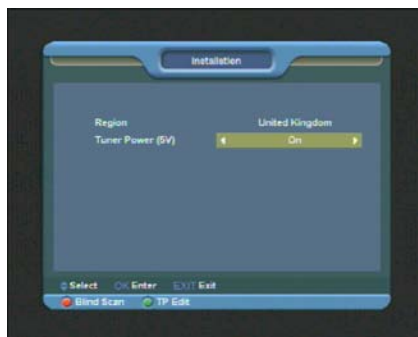
1. Press [WHITE] key into the blind scanning immediately.

11.2. Auto Installation

This function will try to analyze Your dish/LNB configuration and automatically scan for founded settings.

11.3. Terrestrial Installation

Press [OK] key to enter the selected item.

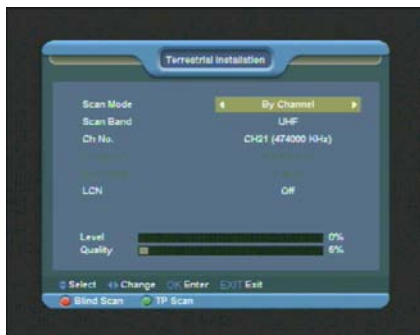


1. You can select the Bandwidth according different country.

2. You can set the Tuner Power ON/OFF.

3. Press [RED] button to run blindscan – scanning of full terrestrial bandwidth.

4. Press [GREEN] key on Terrestrial Installation item to enter the TP Scan menu.



11.3.1. Scan Mode.

1. There are two modes. You can scan channel by channel or by frequency.

2. When scan band is UHF and region is “France”, the range of Ch No. is from 21 to 69. When scan band is VHF and region is “France”, the range of Ch No. is from 1 to 9. (it’s according to region)

3. When you complete your modification, press [GREEN] key to scan.

4. Press [Exit] key to exit the scanning.

11.3.2. LCN

LCN Mode can control the channel whether sort by the sequence information in the streams. The option is: On / Off. You can press [Left/Right] key to select each mode circularly.

12. Menu “Preferences”

When you enter to “Preferences” menu, you will see the screen like below:



In “Preferences” menu:

1. Press [↑/↓] key to select menu items among Language, Parental Control, Time setting, Timer, A/V Control, Miscellaneous, OSD Setting.

2. Press [OK] key to enter the selected item.

12.1. Language

When you enter to “Language” menu, you will see the screen like below:



1. Menu Language: Press [←/→] keys to select OSD menu language.

2. First Audio: Some channels have more than one audio language for choosing; by this function you can set the first audio for this channel. If the playing channel has the same audio as the “First Audio” you set, system will play this audio language as default. If the channel hasn’t the suited audio language, then the system will compare automatically with second audio language.

3.Second Audio: If the channel has no correspond audio with “First Audio” but have corresponded audio with “Second Audio”, system will play the second audio language as default. If no audio language corresponds with the “Second Audio”, then the default language of current channel will be played automatically. The selections of audio languages include: English, French, German, Russian, Arabic, Portuguese, Turkish, Spanish, Polish and Italian.

4.Audio Priority: You can select the Audio Priority among Dolby and Language. If Dolby mode is selected, AC3 audio track will be played even if track language not correspond to selected one in above functions – First and Second Audio.

5.EPG Language: Press [←/→] keys to select EPG language.

6.Subtitle Language: It is an item for changing the language of the Subtitle.

As long as the services support it, the Subtitle language is changeable by press  (YELLOW KEY) on your RCU.

The supported language can be changed without any notice.

7.Teletext Language: Press [←/→] keys to select TXT language.

As long as the services support it, the Teletext language is changeable by press  (GREEN KEY) on your RCU.

The supported language can be changed without any notice.

8.You can press [EXIT] key to enter full screen playing mode.

12.2. Parental Control

You can set a password for anyone who wishes to operate in the “Installation” menu. And you can also set the password for the lock channels. (How to set the lock channel please refer to LOCK) Here will show you how to setting and how to revising the password.

1.In “Parental Control” function, press [OK] key, there will pop an dialogue for you to input the password. When you input the correct password, you will see a screen like below:



2.Menu Lock determining that when user wish to enter “Installation” menu, whether have to input Password or not. If the setting of “Menu Lock” is “Yes” which means user have to key in password, set “No” means unlock.

3.Channel Lock determining that when user wish to play the lock channels, whether have to input the password or not. If the setting is “Yes”, play the channels with lock mark will show up a dialogue on the screen and ask for the password. If the setting of “Channel Lock” is “No”, the Lock function will invalid.

4.New Password is used for revising password; you can input the new password in this item by using number keys directly. After you filled in 4 digital numbers, the highlight will auto skip to Confirm Password and ask you to input the new password again. If the password is correct, the screen will show up a message of “Change password successfully”.

5.You can press [EXIT] key to enter full screen playing mode.

12.3. Time setting

When you enter to “Time Setting” menu, you will see the screen like below:



1.GMT Usage: This item is use for open the usage of GMT. You can press [←/→] keys to switch “On/Off”.

2.GMT Offset: This item is valid only when the setting of “GMT Usage” is “On”. You can press [←/→] keys to switch “GMT Offset” value, and the range is “-12:00 ~ +12:00”, increase each half hour progressively.

3.Summer: You can press [←/→] to control Summer time on or off.

4.Date and Time: items are valid only when the setting of “GMT Usage” is “Off”. You can press [←/→] keys to move highlight and use number keys to input directly.

If the current channel provides the correct time information, you will see the current time while you enter “Time” menu. If the channel doesn’t provide time information, you have to input the date and time information manually.

5.Time Display: This item can control time display on or off on front panel display when full screen play.

6.Press [EXIT] key to draw back from “Time Setting” menu.

12.4. Timer

When you enter to “Timer” menu, you will see the screen like below:



1.Current time information will display on the first column; if the current time is incorrect, please modify the time information in “Time” item.

2.Timer Number: You can press [←/→] keys to set Timer number, and there are 8 timers in total.

3.Timer Mode: There are several modes for Timer to setting, include Off, Once, Daily, Weekly, Monthly and Yearly.

4.Timer Service: There are five options for “Timer Service”, include “TV Channel” and “Radio Channel” (timer setting for channel change and Wakeup/Sleep) and “Record Radio” and “Record TV” (Timer setting for Record the TV or Radio program to USB Hard Disk) and Message (reminding message).

5.When you select “Channel” (timer setting for channel change and wakeup) option in “Timer Service”, the screen will display like below:



Channel: Press [OK] key to enter channel list and select channel that you want to setting.

Date: Use number keys to input your wakeup date.

On Time: Use number keys to input your wakeup time. Once the time's up, no matter what the system is in standby mode or in playing mode, the system will automatically switch to the channel you want and start to play.

6. When you select "Record" option in "Timer Service", "On Time" function enables to set time of begin event planned to record. Also additional functions become active:

Duration: Enables to set time of duration of event planned to record.

Standby After Finish: Enables to set state of receiver after recording event.

7. When you select "Message" (reminding message) option in "Timer Service", the screen will display like below:



Wakeup Message: Press [←/→] key to select reminding message as Birthday, Anniversary and General.

Date: You can use number key to input your wakeup date.

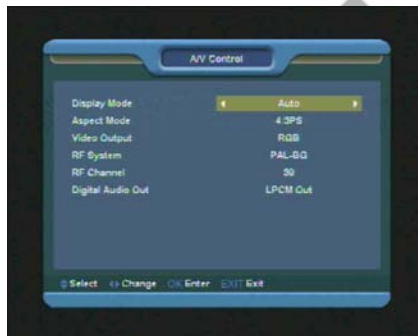
On Time: Use number keys to input your wakeup time. Once the time's up, no matter what the system is in standby mode or in playing mode, the system will automatically pop a reminding message.

The message will always display on the screen, you can press [EXIT] key to close it.

Press [EXIT] key to exit the current menu.

12.5. A/V Control

When you enter to "A/V Control" menu, you will see the screen like below:



1. User can switch display resolution in view mode using P/N (WHITE KEY) button. Also Display Mode is for switching the system outputting video resolution. Move highlight on it and press left or right key, it will switch video resolution circularly by the sequence "by source<-> by native TV<-> 480i<-> 480P<-> 576i<-> 576p<-> 720P<-> 1080i". By Source means system will set the video output resolution according to the program it's playing, different resolution programs switching perhaps will makes TV screen flickering. By Native TV means system will be according to the HDMI TV's max supported resolution to set its resolution, if system is not connected to a HDMI TV, it will set resolution to be default. Depending on selected video output, available resolutions may be different than listed above.

2. Aspect Mode is for switching the screen aspect ratio mode. Now we provide below options: 4:3 PS / 4:3 LB / 16:9/Auto. You can press [←/→] key to select each mode circularly. 16:9 will provide user pillar box mode it means user use 16:9 TV to display but need to see a 4:3 full display picture. System will force press wide screen picture to be narrow and there're black band on left and right site. Auto means system won't do any aspect ratio translation, 16:9 picture source will be good display on a 16:9 TV but will be too narrow on a

4:3 TV, and 4:3 picture source will be too wide in a 16:9 TV but will be good display in a 4:3 TV.

3.Video Output: Press [←/→] to select CVBS, RGB or YUV.

4.RF system and RF channel (optional): are for user to set the TV RF modulator output signal VHF/UHF channel and TV system mode. If your TV is too old to supports CVBS/RGB/HDMI, you can use TV RF cable to connect STB's TV RF output port to TV Antenna input port. (optional)

5.Digital Audio Out is for setting the both SPDIF and HDMI's digital audio output mode, it has options LPCM Out, Auto, You can press [Left/Right] Key to select each mode circularly. LPCM Out means system will decode no matter AC3 or PCM audio track data to be LPCM, digital audio decoder or HDMI TV will get LPCM digital audio data. Auto means system will detect which the connected HDMI TV can decode and then output that data. If HDMI TV can decode AC3, system just output RAW data, if HDMI TV can decode LPCM only, system will just decode AC3 or LPCM to be LPCM and then output.

6.Press [EXIT] key to draw back from "A/V Control" menu.

12.6. Miscellaneous Settings

When you input to "OSD Setting" menu, you will see a screen like below:



1.Subtitle Auto: You can press [←/→] key to select "On" or "Off". If the current channel has subtitle

information, it will be showed up while this function is "On". If this function is "Off", there won't show up subtitle information even if the current channel has subtitle information.

2.Auto Power Down: Enables to set time of automatic power down of receiver when user not use any front panel and remote controller buttons.

3.Panel Power In Standby: Enables to decide about front panel in standby mode. "On" will display clock with actual time. "Off" will display only red Power LED.

4.Loop Control: Enables to activate/deactivate loop function of tuner in standby mode.

12.7. OSD setting

When you input to "OSD Setting" menu, you will see a screen like below:



1.OSD Timeout: When you switch channels in full screen, there will show up some information about current channel on the lower of the screen. And regarding to the duration of these information show up on the screen, you can press [←/→] key to set the time. The range of the duration is 1 – 10 seconds.

2.Position: control display position of the info bar in full screen mode. You can choose "bottom" or "top".

3.OSD Transparency: You can set the transparency of OSD. You can press [←/→] key to select the values. There are 5 levels of transparency, 10%,

20%, 30%, and 40% and “off” (means no transparency function).

4. Load OSD Setting Default: If you are not satisfy with your setting, you can move highlight to this item and press [OK] key to reset parameters as default value.

Press [EXIT] key to draw back from the “OSD Setting” menu.

13. Menu “System”

When you enter to “System” menu, you will see a screen like below:

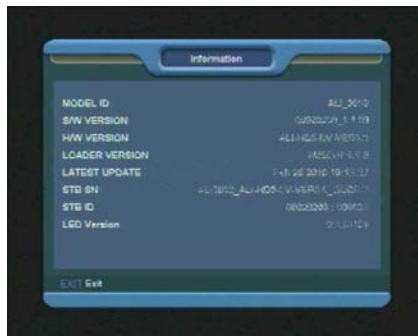


In “Tools” menu:

1. Press [↑/↓] key to select menu items among Information, Default Setting, Software Upgrade, Upgrade by USB, Backup to USB.
2. Press [OK] key to enter the selected item.

13.1. Information

1. When you enter to “Information” menu, you will see a screen like above. The screen displays software, loader and hardware information.
2. Press [EXIT] key to draw back to “Tools” menu.



13.2. Default setting

1. When you enter to “Default setting” menu, you will see a screen like below:



1. When you press [OK] key in the “Default Value” item there will appear a dialogue box for you to enter the password, and the default password is “0000”.

After you input the correct password, there will show a warning message to inquiry you “The operation will load default and erase all the channels that user added, continue?”.

If you select “Yes” option, the all revised parameters of the receiver will reset to default value. Please carefully to using this function.

In step 1 and step 2, press [EXIT] key can draw back from this item and without saving.



2. When you press [OK] key in the “Delete All Channel” you will see a screen like below:



If you select “Yes”, all channels will be deleted.

In step 1 and step 2, press [EXIT] key can exit the function directly without save.

? Frequently Asked Question

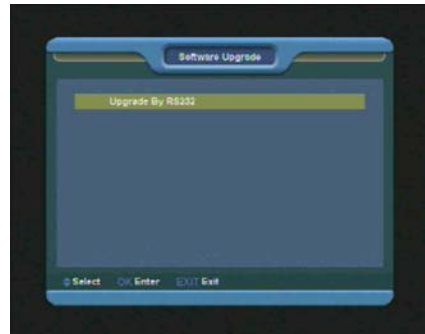
Q: IF I incautiously delete all channels, what should I do?

A: There are two ways to restore:

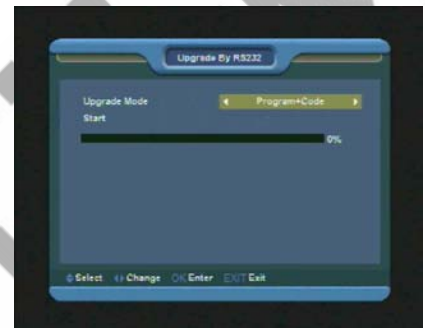
To re-search all channels in “Installation” function.

Use “Default Value” function to restore all channels in “Tools” function

13.3. Software upgrade



13.3.1. Upgrade by RS232:



1. We offer the functions for user to connecting receiver (Master) to the other receiver (Slave) via serial interface.

2. Connect master receiver to slave receiver via serial interface. Enter “Software Upgrade” menu in master receiver and press [↑/↓] keys to switch upgrade mode.

3. Upgrade modes include: Code / Program List / User Back / Video Back / Radio Back / DefaultBD / Default DB + User DB/ Program + Code

4. Moving highlight to “Start” on master receiver and press [OK] key to start upgrade.

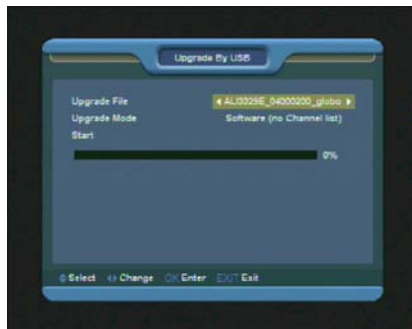
5. Turn on slave receiver and it needn’t operate any setting.

Press [EXIT] key to draw back.

13.4. Upgrade By USB



In this menu you can upgrade the software from USB conveniently, press [OK] button to enter.



In this menu you can select the Upgrade Mode among Software (no channel list), Channel list, All SW + bootloader, All SW + Channel list. You can select the appropriate upgrade file on "Upgrade File" item. After you select the "Upgrade Mode" and "Upgrade File", press [OK] button on "Start" item, the receiver can upgrade automatically.

NOTE: You must put the upgrade file on the /ROOT DIRECTORY of the USB storage.

13.5. Backup to USB

In this menu, you can dump the software to the USB equipment.

In "Backup file", you can press [OK] key to edit the file name.

In "Backup to USB", you can press [OK] to start dumping software.

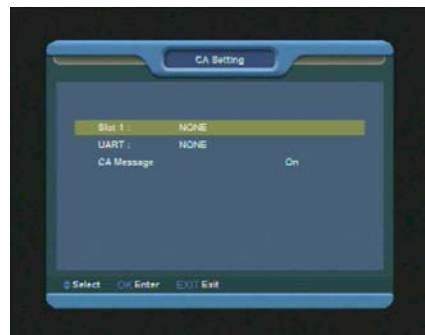
14. Menu "Conditional Access"

1. When you enter to "Conditional Access" menu, you will see a screen like below:



14.1. CA Setting

Receiver provide one CA slot for user to use. Receiver has build in smart card module with CONAX system. By using cards in this system provided by operators, it is possible to watch many scrambled channels coded in this system. This menu shows detailed information about card inserted into card reader module. It allows inserted according to help messages visible on the bottom of the screen.



Note:

All information showed in this menu and submenu are coming from inserted card. In case if anything is wrong, it could be card problem. After inserting

the card correctly at any time, a message-box will show on the screen with message about detecting the card, in "card info" menu all available information will be displayed.

14.2. Common Interface (Optional)

We provide one CI slots for user to use. Using different CAM & cards provided by different CAS operator, you can view many type of scrambled channels.

In this menu you can see the detail information of the CAM & cards inserted in the slots. You can check all this information according to the help message at the bottom of each menu.



Note:

All information showed in this menu and submenu is abstract from CAM & card. In case something is wrong, it may be the problem of CAM or card.

When you insert the CAM correctly at any time, a message will show in the screen to tell you that which CAM has been detected by the receiver and is available now.

15.Menu "USB"

If you enter to the "USB" Menu, you will see the picture like the below:

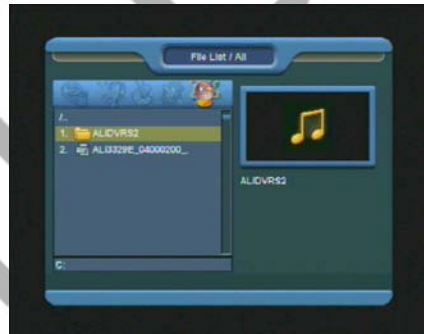
Note:

If no USB Hard Disk insert to the receiver this menu is not available.



15.1. File List

In this menu you can check the files and folders of the USB storage, and you can view files from 5 categories: Record, Image, Software, All.



15.2. Record Manager



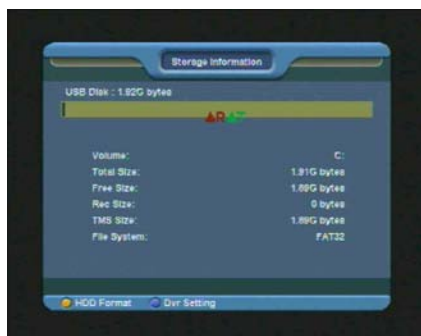
In this menu you can see the record files, and you can edit it:

1.To Lock the file, please press [GREEN] button.

- 2.To Delete the file, please press [BLUE] button.
- 3.To Rename the file, please press [RED] button.
- 4.To play the file with small window, please press [F1] button.
- 5.To play the file with full screen, please press [OK] button.

15.3. Storage Information

Press [OK] button to enter the HDD Information menu like the below picture, in this menu you can see the details information about the HDD.



- 1.If you want to format the HDD, press [YELLOW] button. Then select the File System between the "FAT" and the "NTFS". Press [OK] button to confirm.



Note: If you format the HDD, all the files include JPEG and the record files will be deleted from the HDD.

- 2.If you want to change HDD function between Record, Timeshift and REC & TMS (both previous),

press [BLUE] button.

15.4. PVR Setting



- 1.Time Shift: Enable the Time Shift function.
- 2.Timeshift to Record: When this function is turned on, when you press the [●] button to record the program, it will merge before Timeshifted file with actually recorded file.
- 3.Record as Scrambled: When this function is turned on, when you play the recorded before scrambled file, you must insert the CI module and/or the smart card.
- 4.Record Type: This function enables to choose file format of recorded file.

15.5. USB Speed Test



In "USB Speed Test" menu you can see the Standard speed and your USB hard disk speed, according this information you can know what operation your disk can support.

16.Menu “Internet” (optional)

If you enter to the " Internet " Menu, you will see the picture like the below:



You can get a new software from the network via LAN port.

16.1. Network Local Setting



1.In this menu you may assign a dynamic IP address to the digital receiver. To do so, select the DHCP On.

2.If you have a static IP address, unselect the DHCP Enable, then the IP Address, Subnet Mask, Gateway and DNS options become enabled. You have to set these options according to your IP address.

16.2. HTTP/FTP Upgrade (optional)



1.When connected to the Internet, receiver can manually or automatically make software update from file from server.

Note:

This function depends on connection with external server. In case of no software on server, this function will not work.

16.3. FTP (optional)

This function enables to connect receiver to external FTP server.

17.Menu “Game”



When you enter “Game” menu, you will see three Games include Tetris, Snake and Othello.

Basic operation statement:

17.1. Tetris

1.Moving highlight to “Setup” and press [←/→] key to select the game level (speed).

2.Moving highlight to “Start” and press [OK] key to start the game.

3.Moving highlight to [Cancel]keys and press [OK]key to draw back from the game.

4.Start on the game:

- [←/→] Move shape left or right
- [↑] Rotate clockwise
- [↓] Faster drop
- [OK] Pause/Play the game
- [EXIT] Quit game and draw back to “Game” menu.

17.2. Snake

1.Moving highlight to “Setup” and press [←/→] key to select the game level (speed).

2.Moving highlight to “Start” and press [OK] key to start the game.

3.Moving highlight to[Cancel]keys and press [OK]key to draw back from the game.

Start on the game:

- [←/→/↑/↓] use these arrow keys to guide the snake.
- [OK] Pause/Play game
- [EXIT] Quit game and draw back to “Game” menu.

17.3. Othello

1.Moving highlight to “Setup” and press [←/→] keys to select the game level (degree of difficulty).

2.Moving highlight to “Start” and press [OK] key to start the game.

3.Moving highlight to [Cancel] keys and press [OK] key to draw back from the game.

Start on the game:

- [←/→/↑/↓] use these arrow keys to guide chessman.
- [OK] set chessman.
- [EXIT] Quit game and draw back to “Game” menu

18. Trouble shooting

If you suspect there is a fault with your receiver, please check the following trouble shooting guide before calling authorized service agent.

Warning! Under no circumstances attempt to repair the receiver yourself. Tampering with the receiver may result in fatal electric shock and will invalidate your warranty.

Symptom	Possible cause
Settings you made in the menu have not change	The receiver lost power before being able to enter into standby mode Some of the Settings saved by user can be deleted partly or fully
No signal	The level of signal is weak The cable is incorrectly Connected (short circuit or open circuit)
Receiver is on but no picture or sound except the following messages (NO TV program)	Channel is not available Channel is scramble
Receiver not responding to remote control unit	RCU batteries are dead or inserted incorrectly The RCU is pointing toward wrong direction
Poor picture Quality	The level of Signal strength is low
No sound	RCA cable is connected incorrectly The Volume level is low Muting function is active
No display on the LED Display Panel(optional)	The power cord is not plugged in correctly.
No picture on the screen	Receiver is in Standby mode RCA Jack is not connected firmly to the video output port of television Incorrect channel or video output is selected on television Brightness level of your TV set is incorrectly defined

19.Specifications

General

Satellite Tuner
System standard
Signal Level
LNB power supply

MPEG-Fully DVB-S / DVB-S2 HD compliant
-65dBm to -25dBm
Vertical polarization voltage: +13V/+14V
Horizontal polarization voltage: +18V/+19V
Max. current - 500mA, Overload protection
Frequency: 22±1KHz
Amplitude: 0.6±0.2V
Version 1.0, 1.1, 1.2, USALS
QPSK, 8PSK
2-45 Mbps, Convolution Code Rate
1/2, 2/3, 3/4, 5/6, 7/8 i Auto

22KHz Tone
DiSEqC

Demodulation
Symbol Rate

Terrestrial Tuner
System standard
Input Frequency
RF Input level
Antenna power output
Demodulation
Constellation
Guard Interval
FEC Decoder

MPEG Fully DVB-T compliant
170-230MHz CH5-CH12, 470-860MHz CH21-CH69
-70~-8dBm
5V/50mA max
COFDM 2K/8K
QPSK,16QAM,64QAM
1/4,1/8,1/16,1/32
1/2,2/3,3/4,5/6,7/8

A/V Mode

Video format
Audio format
Aspect Ratio
Audio sampling rate
Audio Type
Graphic display

MPEG-II Main profile/Main level, H.264
MPEG-II layer I&II, AC3
16:9, 4:3 LB, 4:3 PS
32,44.1, 48kHz
Mono Dual Mono, Stereo, Joint stereo
720x576(PAL), 720x480(NTSC), 1280*720, 1920*1080(HDTV)

Microprocessor & Memories

Main processor
Flash memory
RAM memory

396 MHz
32 Mbit
1024Mbit

Power & Environment Condition

Supply Voltage
Supply Power
Power in standby
Operating temp
Storage temperature
Storage Humidity

Free Voltage (100~250V AC, 50/60Hz)
Max.15W
<1W
5℃ ~ 45℃
-10℃ ~ +70℃
5% ~ 95% RH (non condensing)

Physical Specification

Weight
Dimensions
LED display

<2.0Kg
300(W) x 231(D) x 64(H)mm
4Digits

Connection

SAT IN
SAT OUT
AERIAL IN
AERIAL OUT
RS232
Scart
Video

Audio

S/PDIF

USB

HDMI

Ethernet (Optional)

IEC 169-24 Female
IEC 169-24 Female
IEC 169-2 Female
IEC 169-2 Male
9 pin D Rs232 DCE serial port
TV SCART (CVBS/RGB), VCR SCART
Composite Video CVBS
Component Video YPbPr
Audio left
Audio right
optical Digital Audio Output
1 slot USB 2.0
VER 1.2 Type A
RJ45

**Weight and dimensions are not absolutely exact values.
Specifications are subject to change (by manufacturer) without notice.**

20. Declaration of conformity

The manufacturer herewith declares the conformity of that product with the following directives and standards:

Low Voltage Directive 2006/95/EC

EN 60065:2002+A1:2006+A11:2008

EMC Directive 2004/108/EC

EN 55 013:2001+A1:2003+A2:2006

EN 55 020:2007

EN 61 000-3-2:2006

EN 61 000-3-3:2008

Model: Digital Satellite and Terrestrial Receiver DVB-S+T Combo

